

Title (en)

METHOD AND APPARATUS FOR ANALYZING AND CONTROLLING CARBONATE AND SULFIDE IN GREEN LIQUOR SLAKING AND CAUSTICIZING.

Title (de)

VERFAHREN UND VORRICHTUNG ZUR ANALYSE UND KONTROLLE VON CARBONAT UND SULFID IN DER LÖSCHUNG UND KAUSTIFIZIERUNG VON GRÜNLAUKE.

Title (fr)

ANALYSEUR DE CARBONATE/SULFURE ET PROCEDE DE REGULATION.

Publication

EP 0148207 A4 19850730 (EN)

Application

EP 84902258 A 19840516

Priority

US 49584783 A 19830518

Abstract (en)

[origin: WO8404552A1] A process and apparatus for measuring carbonate and sulfide concentrations in white and green pulping liquor and in the slaker/causticizing (S, C1) cells and controlling the causticizing reaction and other stages using this information. Specifically the causticizing control logic is based on determining the concentration of sodium carbonate and sodium sulfide (GC/A) in the green liquor, in the white liquor-mud slurry at the slaker or first causticizer (ML3) and in the white liquor being sent to the digester house and using this information to control the entire process. The concentration and flow rate of the green liquor may be measured and controlled quite easily. The proposed strategy will control the green liquor flow rate (V41) to the slaker to maintain the desired Na₂CO₃ concentration in the slaker/causticizer liquor despite variations which occur in the lime. The green liquor concentration is also controlled in a control loop. Weak wash liquor (L40) is added to the green liquor to maintain the concentration of the Na₂CO₃ in the green liquor. The slaking/causticizing process is controlled by adjusting the flow rate and concentration of the green liquor. This strategy will control the process based on direct measurements of the critical component in the system, sodium carbonate. The green liquor flow rate will be automatically adjusted by a control loop to maintain the desired Na₂CO₃ concentration in the white liquor. The last measurement is to determine the concentrations of sodium hydroxide, sodium carbonate, and sodium sulfide in the white liquor which is sent to the digester house to be used in the cooking process. It is important to measure the sodium hydroxide and sodium sulfide concentrations in the white liquor (RS3, GC/A) so that the amount of liquor to be charged in the digester(s) may be correctly determined. Changes in sodium sulfide concentration (generated at the recovery boiler) can affect white liquor (AA/EA) concentration.

IPC 1-7

D21C 11/04; **D21C 11/12**

IPC 8 full level

D21C 11/00 (2006.01); **D21C 11/04** (2006.01)

CPC (source: EP)

D21C 11/0064 (2013.01)

Citation (search report)

- [AP] TAPPI JOURNAL, vol. 66, no. 7, July 1983, pages 39-42, Atlanta, GA., US; M.E. HAAS: "New recausticizing plant reduces energy 30%"
- See references of WO 8404552A1

Designated contracting state (EPC)

FR SE

DOCDB simple family (publication)

WO 8404552 A1 19841122; EP 0148207 A1 19850717; EP 0148207 A4 19850730; FI 850235 A0 19850118; FI 850235 L 19850118; JP S60501318 A 19850815; NO 850160 L 19850115

DOCDB simple family (application)

US 8400739 W 19840516; EP 84902258 A 19840516; FI 850235 A 19850118; JP 50213284 A 19840516; NO 850160 A 19850115